REMARKS

Claims 1-4, 8, 9, and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Uehara et al. (US 6,329,980) in view of Furuhashi et al. (US 6,556,180), claims 5-7, 10, 11, 13, and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Uehara et al. in view of Furuhashi et al. and Kuga (US 5,828,367), and claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Uehara et al. in view of Furuhashi et al., Kuga, and Kasahara et al. (US 6,414,657). Applicant respectfully traverses these rejections as being based upon combinations of prior art references that neither teach nor suggest the novel combination of features recited in independent claims 1, 5, 8, and 10, and hence dependent claims 2-4, 6, 7, 9, and 11-14.

Initially, Applicant respectfully requests clarification as to which claims are rejected under 35 U.S.C. § 103(a) in view of Uehara et al. and Furuhashi et al. For example, on page 2 of the Final Office Action, claims "1-2 and 8-9" are listed in the heading of the rejection as being rejected under 35 U.S.C. § 103(a) in view of Uehara et al. and Furuhashi et al., and yet claims 2, 3-4, 8 and 14, and 9 are discussed in the body of the rejection. In addition, in the body of the rejection, Matsumura et al. is repeatedly cited as teaching specific features. Thus, Applicant respectfully requests that the rejection of claims and the specific prior art references being used to reject the claims be clarified. Accordingly, Applicant respectfully submits that the present Response is based upon the citation of claims provided in the body of the rejections, and not necessarily based upon the heading of the rejections. If, in the event that the Examiner changes or modifies the rejections, either the identification of claims being rejected and/or identification of the reference(s) used to rejected the claims, Applicant respectfully requests that finality of the

Final Office Action dated July 8, 2004 be withdrawn to provide Applicant with a fair and reasonable opportunity with which to address the changed or modified Office Action.

The Office Action maintains that Uehara et al. teaches a color LCD display apparatus for "increasing a data voltage of a current frame if the data voltage of the current period is greater than the previous period, and decreasing the data voltage of the current frame if the data voltage of the current period is less than the previous period (see figures 1, 4-6, 14; column 1, lines 49-51 and column 9, lines 6-60)." In addition, the Office Action maintains that Furuhashi et al. teaches "a delay period is a frame period (see figure 1 and column 2, lines 32-43)." Thus, the Office Action concludes that it would have been obvious to have modified [Uehara et al.] with the teaching of Furuhashi et al., since "Uehara et al. [discloses that] a delay period could be changed (see Uehara et al's column 7, lines 9-16), a frame period is a common delay period in a display and it has been generally recognized as being within the level of ordinary skill in the art, so as to increase the speed of displaying a high quality picture by extending the comparison period by one dot period to one frame period." Furthermore, the Office Action alleges that Kuga teaches "an LCD display apparatus for decreasing a data voltage of a current frame if the data voltage of the current frame is the same as the previous frame (see figures 4-5; column 2, lines 33-39 and column 5, lines 17-25)." Thus, the Office Action concludes that it would have been obvious to "have modified Uehara et al as modified with the teaching of Kuga, so as to save power in an LCD display (see abstract and column 2, lines 33-39)." Applicant respectfully disagrees.

Uehara et al. discloses (col. 9, lines 35-44, and FIG. 6) that if a difference between previous and subsequent amplitudes is small, then an amplitude of a correction signal (6-*d* in

FIG. 6) is greatly decreased and added to an original pixel signal (6-*e* in FIG. 6). Conversely, if the difference is large, then the amplitude of the correction signal (6-*d*) is slightly decreased and added to the original pixel signal (6-*e*). Thus, Applicant respectfully asserts that Uehara et al. teaches always increasing the original pixel signal by the correction signal regardless of the difference between previous and subsequent amplitudes. Applicant respectfully points out that the Examiner confirms Applicant's assertion under the Office Action's heading entitled "Response to Arguments" that Uehara et al. discloses these teachings.

Furuhashi et al. teaches a liquid crystal display device including a signal control unit, wherein a frame memory delays a first display data by one frame and stores the delayed display data, an arithmetic operation circuit that compares the delayed display data stored in the frame memory with a second display data, and an addition/subtraction circuit for adding and subtracting correction data output by the arithmetic operation circuit to and from the first display data.

With regard to the Office Action's allegation that "a frame period is a common delay period in a display and it has been generally recognized as being within the level of ordinary skill in the art, so as to increase the speed of displaying a high quality picture by extending the comparison period by one dot period to one frame period," Applicant respectfully submits that none of the prior art of record teaches, either explicitly or implicitly, that "a frame period is a common delay period in a display" is "generally recognized as being within the level of ordinary skill in the art, so as to increase the speed of displaying a high quality picture by extending the comparison period by one dot period to one frame period" or is common knowledge or well

known in the art. Moreover, Applicant again respectfully traverses the "Official Notice" set forth in the Office Action.

As pointed out in MPEP 2144.03B, "[I]f such notice is taken, the basis for such reasoning must be set forth explicitly." In addition, "[t]he Examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge. See *Soli*, 317 F.2d at 946, 37 USPQ at 801." In response, the Office Action alleges that "Furuhashi et al. teach a frame period is a delay period and the frame is common delay period since it is convenience to compare frame data(see figure 1 and column 2, lines 33-50)." Applicant respectfully asserts that the alleged disclosure by Furuhashi et al. fails to establish any specific factual finding predicated on sound technical and scientific reasoning to support the Examiner's conclusion of common knowledge. Specifically, the disclosure of Furuhashi et al. cited by the Examiner makes absolutely no mention that a frame period is a common delay period such that a delay period could be changed "so as to increase the speed of displaying a high quality picture by extending the comparison period by one dot period to one frame period," as alleged by the Examiner (see page 2 to page 3 of Office Action dated July 8, 2004) .

Accordingly, since the Examiner has again not provided any sound technical or scientific reasoning to support the allegation that "a frame period is a common delay period in a display" is "generally recognized as being within the level of ordinary skill in the art, so as to increase the speed of displaying a high quality picture by extending the comparison period by one dot period to one frame period" or is common knowledge or well known in the art, Applicant again respectfully submits that the combination of features recited in claims 1-14 is not well known,

and thus, not obvious. Thus, Applicant respectfully asserts that the Office Action has failed to establish a *prima facie* case of obviousness with respect to claims 1-14.

With regard to Kuga and Kasahara et al., Applicant respectfully submits that Kuga teaches determining image signals of current and previous fields to be a constant image if the image signals of the current field coincide with the image signals of the previous field by more than 50% and driving the LCD panel in a low-voltage drive mode, otherwise, the LCD panel is driven in a normal drive mode. Similarly, Applicant respectfully submits that Kasahara et al. teaches a detection apparatus and a detecting method of pseudo-contour noise that appears when gradation display is performed in a sub-field method on a display device, such as a plasma display device or a digital micromirror device. Accordingly, Applicant respectfully asserts that neither Kuga nor Kasahara et al., whether taken singly or in combination, remedy the deficiencies of Uehara et al. and/or allegations made by the Office Action with respect to "common knowledge."

In contrast to Uehara et al., independent claims 1, 5, and 8 all recite, in part, "decreasing the data voltage of the current frame if the data voltage of the current frame is not greater than that of the previous frame." Similarly, independent claim 10 recites, in part, "more decreasing the voltage level when the voltage level is more reduced at the current frame than at the previous frame." Thus, Applicant respectfully asserts that Uehara et al., Furuhashi et al., Kuga, and/or Kasahara et al., whether taken singly or in multiple combinations, fail to teach or suggest all the features of independent claims 1, 5, 8 and 10.

Since the Office Action fails to meet the requirements for establishing a *prima facie* case of obviousness as to independent claims 1, 5, 8 and 10, claims 1, 5, 8, and 10 are not obvious,

and hence dependent claims 2-4, 6, 7, 9, and 11-14 are not obvious. Thus, Applicant respectfully requests that the rejections of claims 1-14 under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

In view of the foregoing, Applicant respectfully requests reconsideration and timely allowance of the pending claims. Should the Examiner believe that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicant's undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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Dated: October 8, 2004

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